

What is claimed is:

1. A hydrophilic member comprising:

5 a tin oxide layer formed on a surface of a substrate; and
an overcoat layer formed on the surface of said tin oxide layer, wherein said overcoat layer is selected from at least one of silicon oxide, aluminum oxide, zirconium oxide, ceric oxide, and titanium oxide, and the mean surface roughness (R_a) of the top surface thereof is within a range of 0.5 to 25 nm.

10 2. A hydrophilic member according to claim 1, wherein said tin oxide layer has a rutile structure. (SnO_2)

Sub C 15 3. A hydrophilic member according to claim 1, wherein the mean surface roughness (R_a) of said tin oxide layer is also within a range of from 0.5 to 25 nm.

4. A hydrophilic member according to claim 1, wherein the mean spacing (S_m) of the irregularities of the top surface of said overcoat layer is within a range of 4 nm to 300 nm.

20 5. A hydrophilic member according to claim 1, wherein said tin oxide layer has a thickness within a range of 10 to 800 nm.

6. A hydrophilic member according to claim 1, wherein said overcoat layer has a thickness within a range of 0.1 to 100nm.

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7. A hydrophilic member according to claim 12, wherein the refractive index of said undercoat film acting as a barrier against alkali is between the refractive index of the substrate and the refractive index of the tin oxide layer.

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8. A hydrophilic member according to claim 12, wherein said undercoat film is a layered body of tin oxide and silicon oxide.

9. A hydrophilic member according to claim 1, wherein said substrate is selected from the group consisting of: glass the main component of which is silicon oxide; tile; ceramic; and a metal plate.

10. A hydrophilic member according to claim 1, wherein said hydrophilic member is a mirror having a thin metal film formed on the surface thereof, between the substrate and the tin oxide layer.

11. A hydrophilic member according to claim 1, wherein said overcoat layer is formed directly on the surface of the substrate.

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12. A hydrophilic member according to claim 1, further including an undercoat film disposed between the surface of said substrate and said tin oxide layer, said undercoat film acting as a barrier against alkali.

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13. A hydrophilic member according to claim 12, wherein said hydrophilic member is a

mirror having a thin metal film formed on the surface thereof, between the undercoat film and the tin oxide layer.

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14. A hydrophilic member according to claim 2, wherein the mean surface roughness (R_a) of said tin oxide layer is also within a range of from 0.5 to 25 nm.

15. A hydrophilic member according to claim 2, wherein the mean spacing (S_m) of the irregularities of the top surface of said overcoat layer is within a range of 4 nm to 300 nm.

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16. A hydrophilic member according to claim 14, wherein the mean spacing (S_m) of the irregularities of the top surface of said overcoat layer is within a range of 4 nm to 300 nm.

17. A hydrophilic member according to claim 2, wherein said tin oxide layer has a thickness within a range of 10 to 800 nm.

18. A hydrophilic member according to claim 15, wherein said tin oxide layer has a thickness within a range of 10 to 800 nm.

19. A hydrophilic member according to claim 16, wherein said tin oxide layer has a thickness within a range of 10 to 800 nm.

20. A hydrophilic member according to claim 2, wherein said overcoat layer has a thickness within a range of 0.1 to 100nm.